

In the claims:

1. (currently amended) A stator for an electrical machine, in particular a rotary current generator, in which the stator (36) is made by the flat-packet technique and comprises at least one stator iron (10, 30) and the stator iron (10) has a substantially annular-cylindrical shape, and in which the stator iron (10) has an axial direction (a) which is oriented in the direction of a cylinder axis, and the stator iron (10) has an end face which is oriented in the direction of the cylinder axis and defines a slot area (A_{Nut}), characterized in thatwherein a ratio A formed of the slot area (A_{Nut}) and the end face area amounts to between 0.4 and 0.8, wherein the stator iron (10, 30) has a number of individual laminations (13) which are stacked one above the other, and also has two face ends (22) which rest directly against one another.

2. (currently amended) The stator as defined by claim 1, characterized in thatwherein the ratio A is between 0.4 and 0.7.

3. (currently amended) The stator as defined by claim 1, characterized in thatwherein the stator iron (10) has forty- eight inner teeth (19), and the ratio A amounts to between 0.45 and 0.70.

4. (currently amended) The stator as defined by claim 3,
~~characterized in thatwherein~~ the ratio A is between 0.45 and 0.60.

5. (currently amended) The stator as defined by claim 1,
~~characterized in thatwherein~~ the stator iron (10) has thirty-six inner teeth
(19), and the ratio A amounts to between 0.4 and 0.6.

6. (currently amended) The stator as defined by claim 5,
~~characterized in thatwherein~~ the ratio A is between 0.40 and 0.55.

7. (currently amended) The stator as defined by claim 1,
~~characterized in thatwherein~~ the a slot fill factor (F) amounts to between
50% and 80%.

8. (currently amended) The stator as defined by claim 7,
~~characterized in thatwherein~~ the slot fill factor F amounts to between 60%
and 70%.

9. (currently amended) The stator as defined by claim 1,
~~characterized in thatwherein~~ a slot (25) has a contour which is defined
toward the yoke by diametrically opposed tooth sides (59) and a yoke
contour (62), and the tooth sides (59) of a slot (25) have a maximum
spacing (b_{z3}) from one another in the circumferential direction; and that a

slot pitch (τ_3) is the spacing between two directly adjacent tooth centers of the stator iron (10) at the diameter of the maximum spacing (b_{z3}), where (c3), which is a ratio formed of a spacing (b_{z3}) toward a yoke and the slot pitch (τ_3) at the yoke, amounts to between 0.45 and 0.65.

10. (currently amended) The stator as defined by claim 1, ~~characterized in that wherein~~ a slot (25) has a contour which is defined toward the tooth head by diametrically opposed tooth sides (59) and tooth head contours (62), and the tooth sides (59) of a slot (25), at the transition to the tooth head contours (65), have a spacing (b_{z2}) from one another in the circumferential direction; and that a slot pitch (τ_2) is the spacing between two directly adjacent tooth centers at the diameter of the spacing (b_{z2}) of the stator iron (10), and where (c2), which is a quotient of a slot width toward a tooth head and a slot pitch (τ_2) at a tooth, amounts to between 0.45 and 0.65.

11. (currently amended) The stator as defined by claim ~~1~~10, ~~characterized in that wherein~~ (c2) amounts to between 0.50 and 0.60 and (c3), which is a ratio formed of a spacing (b_{z3}) toward a yoke and the slot pitch (τ_3) at the yoke, amounts to between 0.47 and 0.60.

12. (currently amended) The stator as defined by claim 1, ~~characterized in that wherein~~ the tooth sides (59) change over by means of

rounded transitions to the tooth head contours (65) and the a yoke contour (62), and the radii amount to between 0.3 mm and 2.0 mm.